AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) In a server device, a method for processing an encoded data stream wherein said encoded data stream is non-preemptable and subject to precedence constraints, said method comprising:

assigning a processor settings ~~setting~~ to tasks ~~a task~~ in a plurality of tasks, wherein a respective ~~said~~ processor setting corresponds to a setting used by a processor of a client device to execute a ~~said~~ task of said plurality of tasks and wherein said task decodes without preemption a frame of said encoded data stream;

generating an execution schedule for decoding said encoded data stream, wherein said execution schedule comprises a sequence for executing at said client device said plurality of tasks according to precedence constraints that fix the order for executing at least a subset of said tasks; and

transmitting to said client device said execution schedule and said processor settings ~~setting~~.

2.   (Original) The method as recited in Claim 1 wherein said processor setting comprises a voltage amount used by said processor to execute said task.

3.   (Original) The method as recited in Claim 1 wherein said processor setting comprises a processor clock speed at which said processor executes said task.

4.   (Original) The method as recited in Claim 1 wherein said processor of said client device operates using a discrete variable-voltage power supply.

5.   (Previously Presented) The method as recited in Claim 1 wherein said encoded data stream comprises an audio portion and a video portion, said video portion comprising a first frame and a second frame, wherein decoding of said first frame is dependent on decoding of said second frame.

6.   (Canceled).

7.   (Previously Presented) The method as recited in Claim 1 wherein said generating said execution schedule is independent of client device type.

8.   (Original) The method as recited in Claim 1 wherein said step of generating said execution schedule comprises:

generating different sequences for executing a subset of said plurality of tasks; and

selecting a sequence that results in minimum energy use by said processor of said client device.

9.   (Previously Presented) The method as recited in Claim 1 comprising:

transmitting said encoded data stream to said client device with said execution schedule and said processor setting.

10.   (Currently Amended) A computer system comprising:

a bus;

a memory unit coupled to said bus;

a communication interface coupled to bus and operable to establish a communication link with a client device; and

a processor coupled to said bus, said processor for executing a method for processing an encoded data stream wherein said encoded data stream is non-preemptable and subject to precedence constraints, said method comprising:

assigning ~~a~~ processor <u>settings</u> ~~setting~~ to <u>tasks</u> ~~a task~~ in a plurality of tasks, wherein <u>a respective</u> ~~said~~ processor setting corresponds to a setting used by a processor of said client device to execute <u>a</u> ~~said~~ task and wherein said task decodes without preemption a frame of said encoded data stream;

generating an execution schedule for decoding said encoded data stream, wherein said execution schedule comprises a sequence for executing at said client device said plurality of tasks according to precedence constraints that fix the order for executing at least a subset of said tasks; and

transmitting to said client device said execution schedule and said processor <u>settings</u> ~~setting~~.

11.   (Original) The computer system of Claim 10 wherein said processor setting comprises a voltage amount used by said processor of said client device to execute said task.

12.   (Original) The computer system of Claim 10 wherein said processor setting comprises a processor clock speed at which said processor of said client device executes said task.

13.   (Original) The computer system of Claim 10 wherein said processor of said client device operates using a discrete variable-voltage power supply.

14.   (Previously Presented) The computer system of Claim 10 wherein said encoded data stream comprises an audio portion and a video portion, said video portion comprising a first frame and a second frame, wherein decoding of said first frame is dependent on decoding of said second frame.

15.   (Canceled).

16.   (Previously Presented) The computer system of Claim 10 wherein said generating said execution schedule is independent of client device type.

17.   (Currently Amended) The computer system of Claim 10 wherein said generating ~~step b) of said method~~ comprises:

generating different sequences for executing a subset of said plurality of tasks; and

selecting a sequence that results in minimum energy use by said processor of said client device.

18.   (Previously Presented) The computer system of Claim 10 wherein said method comprises:

transmitting said encoded data stream to said client device with said execution schedule and said processor setting.

19.   (Currently Amended) A computer-usable medium having computer-readable program code embodied therein for causing a computer system to perform a method of processing an encoded data stream, said method comprising:

assigning ~~a~~ processor <u>settings</u> ~~setting~~ to <u>tasks</u> ~~a task~~ in a plurality of tasks, wherein <u>a respective</u> ~~said~~ processor setting corresponds to a setting used by a processor of a client device to execute <u>a</u> ~~said~~ task <u>of said plurality of tasks</u> and wherein said task decodes without preemption a frame of said encoded data stream;

generating an execution schedule for decoding said encoded data stream, wherein said execution schedule comprises a sequence for executing at said client device said plurality of tasks according to precedence constraints that fix the order for executing at least a subset of said tasks; and

transmitting to said client device said execution schedule and said processor <u>settings</u> ~~setting~~.

20.   (Original) The computer-usable medium of Claim 19 wherein said processor setting comprises a voltage amount used by said processor to execute said task.

21.   (Original) The computer-usable medium of Claim 19 wherein said processor setting comprises a processor clock speed at which said processor executes said task.

22.   (Original) The computer-usable medium of Claim 19 wherein said processor of said client device operates using a discrete variable-voltage power supply.

23.   (Previously Presented) The computer-usable medium of Claim 19 wherein said encoded data stream comprises an audio portion and a video portion, said video portion comprising a first frame and a second frame, wherein decoding of said first frame is dependent on decoding of said second frame.

24.   (Canceled).

25.   (Original) The computer-usable medium of Claim 19 wherein said step of generating said execution schedule is independent of client device type.

26.   (Previously Presented) The computer-usable medium of Claim 19 wherein said computer-readable program code embodied therein causes a computer system to perform said method comprising:

generating different sequences for executing a subset of said plurality of tasks; and

selecting a sequence that results in minimum energy use by said processor of said client device.

27.   (Previously Presented) The computer-usable medium of Claim 19 wherein said computer-readable program code embodied therein causes a computer system to perform said method comprising:

transmitting said encoded data stream to said client device with said execution schedule and said processor setting.

28. (Previously Presented) In a client device, a method for decoding an encoded data stream, said method comprising:

receiving said encoded data stream, wherein said encoded data stream is non-preemptable and subject to precedence constraints that fix the order for executing at least a subset of said tasks;

receiving an execution schedule for decoding said encoded data stream, wherein said execution schedule comprises a sequence for executing a plurality of tasks according to said precedence constraints, wherein a task decodes without preemption a frame of said encoded data stream; and

receiving a processor setting for each task in said plurality of tasks, wherein said processor setting specifies a setting used by a processor of said client device to execute a respective task.

29. (Original) The method as recited in Claim 28 wherein said processor setting comprises a voltage amount used by said processor of said client device to execute said task.

30. (Original) The method as recited in Claim 28 wherein said processor setting comprises a processor clock speed at which said processor of said client device executes said task.

31. (Original) The method as recited in Claim 28 wherein said processor of said client device operates using a discrete variable-voltage power supply.

32. (Previously Presented) The method as recited in Claim 28 wherein said encoded data stream comprises an audio portion and a video portion, said video portion comprising a first frame and a second frame, wherein decoding of said first frame is dependent on decoding of said second frame.

33. (New) The method as recited in Claim 1 wherein said step of generating said execution schedule comprises:

identifying a set of feasible execution schedules;

separating each of said feasible execution schedules at least into respective first subschedules and respective second subschedules, wherein a second subschedule begins at a point where a corresponding first subschedule ends, wherein said point is selected such that said second subschedules are independent of said first subschedules;

selecting one of said first subschedules that results in minimum energy use by said processor of said client device;

selecting one of said second subschedules that results in minimum energy use by said processor of said client device; and

concatenating said one of said first subschedules and said one of said second subschedules to generate at least a portion of said execution schedule.